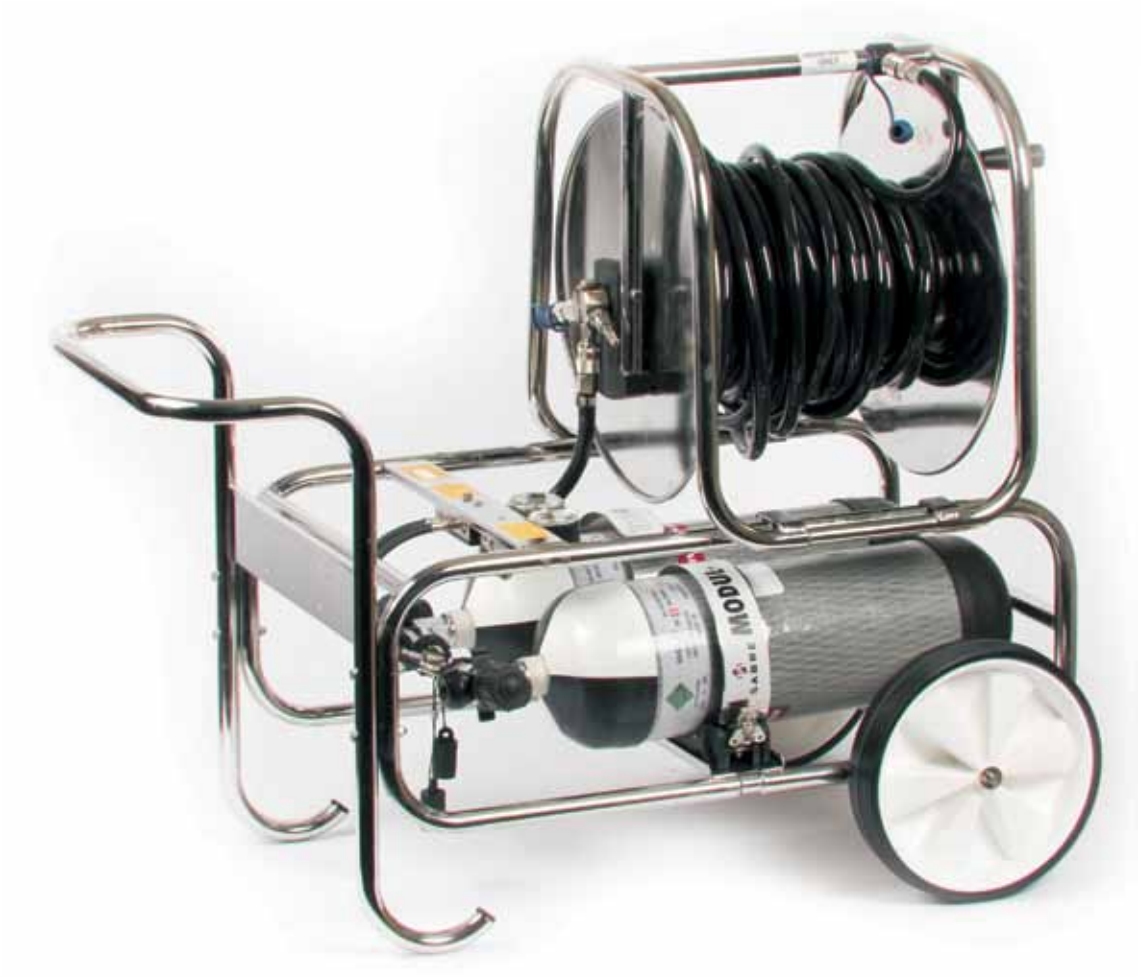
AIRLINE

BREATHING APPARATUS



SCOTT SAFETY

AIRLINE
BREATHING APPARATUS

Airline breathing apparatus is the perfect solution for applications across many industries. However, the selection of the equipment has traditionally been seen as a complicated process due to the high number of options available.

- Scott Safety has over 65 years experience in the manufacture of breathing apparatus, providing unrivalled technical support and advice. With the widest choice of airline breathing solutions, the Scott Safety range of products is internationally renowned for reliability, ease of use, durability and comfort.

  Ideal for environments where ambient oxygen cannot be guaranteed, airline breathing apparatus combines the highest degree of respiratory protection with long duration use. Fed by a medium pressure air hose, it is used for industrial applications as diverse as entering sewers, cleaning out tanks and spray painting military aircraft. The advantages are clear: there is no weight, no bulk and – in theory – an infinite amount of air.

  Completely modular, Scott Safety airline components afford almost unlimited flexibility, allowing the user to individually specify a system that exactly meets their operational needs. Multiple configurations can be selected from a standalone portable product – for use where no other supply of compressed air is available – to products that integrate into existing compressor-fed airline infrastructure.

WHAT TO CONSIDER WHEN SPECIFYING

Before specifying airline breathing apparatus, it is vital that the intended work site is subject to a thorough risk assessment and that the required equipment advised by that assessment are in place before undertaking the task.

AREAS TO CONSIDER INCLUDE:

- **PRIMARY AIR SOURCE**
  - *This can be a factory airline, a compressor or compressed air cylinders. If a factory airline or compressor is to be used, is the air supply clean?*

    An AFU (Air Filtering Unit) will only remove water, particulates and oil mist. If there is any possibility of Carbon Monoxide or Carbon Dioxide in the air supply, then an air purifier will need to be used or an alternative clean air supply found.

- **SUPPLY PRESSURE WARNING DEVICE**
  - *How will the wearer know if there is a drop in medium pressure supply?*

    Inline warning whistles give an audible warning.

- **RESERVE AIR SUPPLIES**
  - *Do you need to provide an alternative supply of air?*

    In addition to being standalone supply systems, the Modulair trolley system can be used as a back-up system, should a compressor supply fail.

- **CONNECTING UP THE SYSTEM**
  - *How are you going to connect the users to their air supply?*

    Scott Safety have a range of hose types and lengths and CEN approved couplings to meet your operational requirements.

- **CHOOSING THE RIGHT AIRLINE BREATHING APPARATUS FOR THE JOB IN HAND**
  - *Will the wearer always work from the same airline supply line?*
  - *Will mobility between lines be required?*
  - *Is the wearer working in a confined space?*

SERVICING AND MAINTENANCE

Scott Safety treats the role of after sales support very seriously offering a comprehensive level of technical support and certified training courses for wearers, instructors and service technicians.

This is backed up through a global network of regional support centres and distributors around the world.

For queries regarding the location of our service centres visit www.scottsafety.com or call our customer services on 131 772.

SCOTT SAFETY

MODULAIR

AIRLINE TROLLEY - PORTABLE AIR IN RESTRICTED ACCESS AREAS

The Modulair is a compact, easy to use airline trolley system designed to provide portable clean air in restricted access areas.

Versatile and robust, it consists of a lightweight stainless steel hose reel unit and cylinder frame that can be used independently or together. The frame is designed to carry a pair of cylinders and, where required, an additional frame can be vertically stacked to allow connection of up to four cylinders. This, in conjunction with proven 300 bar high performance pneumatics delivering up to 1000 litres of breathing air per minute, permits four people to work at the same time.

Long duration operation is made simple through adjustable cylinder bands and high pressure cylinder connectors to accommodate a variety of cylinder sizes at both 200 and 300 bar. Non-return bleed valves fitted to the cylinder connectors enable cylinders to be replaced independently for continuous operation.

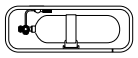
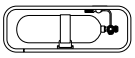
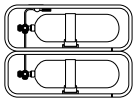
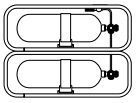
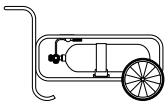
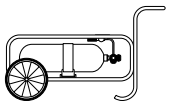
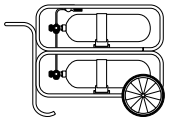
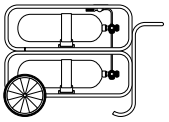
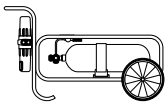
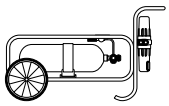
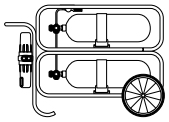
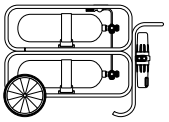
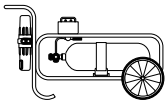
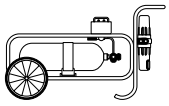
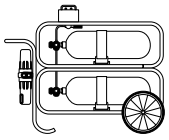
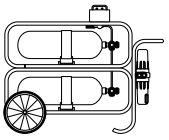
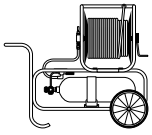
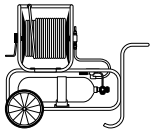
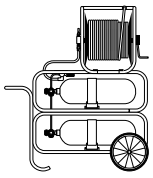
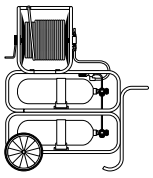
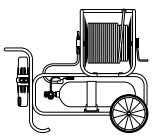
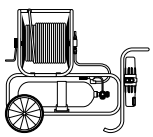
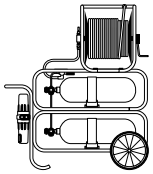
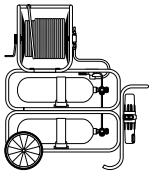
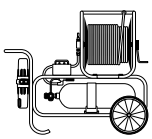
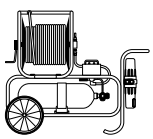
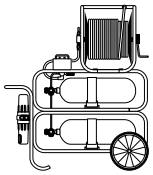
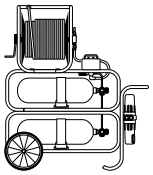
To safeguard against any drop in air supply pressure the Modulair can be fitted with a medium pressure warning whistle for audible alarm if the airline supply pressure falls below 3.8-4.1 bar (55-60 psi). In either case, the operation of the alarm informs safety rescue personnel to switch over to the reserve air supply, change cylinders or initiate evacuation procedures as appropriate.

- Robust and reliable, stainless steel construction
- 2 or 4 cylinder capability
- 2 or 4 man operation
- High performance pneumatics

HOW TO ORDER

MODULAIR CONFIGURATIONS

BASIC UNIT: M-FRM-X-Y
X = NO. OF CYLINDERS Y = NO. OF WEARERS (2 OR 4)

	2 CYLINDERS / MAX 2 USERS	2 CYLINDERS / MAX 4 USERS	4 CYLINDERS / MAX 2 USERS	4 CYLINDERS / MAX 4 USERS
FRAME	Frame and cylinder unit only			
	 M-FRM-2-2	 M-FRM-2-4	 M-FRM-4-2	 M-FRM-4-4
TROLLEY	Mobile trolley conversion = frame fitted with handles and wheels			
	 M-FRM-2-2-T	 M-FRM-2-4-T	 M-FRM-4-2-T	 M-FRM-4-4-T
	Mobile trolley conversion with additional AFU & MP whistle			
	 M-FRM-2-2-T-AFU	 M-FRM-2-4-T-AFU	 M-FRM-4-2-T-AFU	 M-FRM-4-4-T-AFU
	Mobile trolley conversion with additional AFU			
	 M-FRM-2-2-T-AFU	 M-FRM-2-4-T-AFU	 M-FRM-4-2-T-AFU	 M-FRM-4-4-T-AFU
HOSE REEL TROLLEY	Hose reel trolley assembly – frame fitted with handles and wheels			
	 M-FRM-2-2-HRT	 M-FRM-2-4-HRT	 M-FRM-4-2-HRT	 M-FRM-4-4-HRT
	Hose reel trolley assembly – with additional AFU & MP whistle			
	 M-FRM-2-2-HRT-AFU	 M-FRM-2-2-HRT-AFU	 M-FRM-2-2-HRT-AFU	 M-FRM-2-2-HRT-AFU
	Hose reel trolley assembly – with additional AFU			
	 M-FRM-2-2-HRT-AFU	 M-FRM-2-4-HRT-AFU	 M-FRM-4-2-HRT-AFU	 M-FRM-4-4-HRT-AFU

FLITE ESCAPE
POSITIVE PRESSURE AIRLINE/ ESCAPE BREATHING APPARATUS

Flite, in its simplest form, provides the user with breathing air from a medium pressure airline. It consists of a lightweight, easy to don bandolier harness with padded shoulder strap, a pigtail connection with safety locking coupling, a Tempest positive pressure demand valve with first breath activation and hands-free bypass facility.

Flite Escape is widely used by people working in confined spaces or hazardous environments, such as the oil and gas industry, where levels of H_2S can be extremely high.

As the equipment is positive pressure, it provides the user with the highest possible protection factor allowing Flite to be used in Immediately Dangerous to Life & Health (IDLH) and oxygen deficient environments.

Flite apparatus can be used with any of the Scott Safety range of positive pressure face masks: Vision 3 or Promask Positive Pressure. The Flite also uses 10 minute escape steel cylinders (purchased separately).

Flite Escape

- Added safety of escape cylinder
- 10 minute duration
- Simple operation
- Simple to service

FACE MASKS
POSITIVE PRESSURE LEFT QUICK FIT

The Scott Safety Promask PP (Positive Pressure) LQF (Left Quick Fit) full face mask is manufactured from halo-butyl (non-dermatatic). The Promask features a wide lens for extended field of vision. The front mounted speech diaphragm provides easy communication with colleagues.

The Vision 3 PP (Positive Pressure) LQF (Left Quick Fit) features a multi-curvature visor made of scratch and impact resistant polycarbonate material with a scratch resistant coating providing excellent panoramic vision. The face mask features a left hand side bayonet connection for the demand valve with an option of an additional right quick fit port to take a communications interface if required.

The Promask PP and Vision 3 PP are suitable for use with the Scott Safety range of SCBA and airline apparatus.

Promask PP

Vision 3 PP

SCBA
SELF CONTAINED BREATHING APPARATUS

CEN-PAQ

Self-contained breathing apparatus can also be used in conjunction with an airline by way of a simple attachment (left).

This could be used to extend the working duration of the set (overcoming some of the limitations of the cylinder duration) or as a long duration escape set should the airline supply be compromised.

The CEN-PAQ HI-Vis consists of a set of pneumatics mounted in a soft, comfortable jacket. Cylinder duration of 30 minutes give the user flexibility, both in terms of weight and profile of the set.

The ACS and Contour ranges can also be used with an airline attachment. The advantage of this equipment is you can carry between 30-90 minutes of air as an escape reserve. Alternatively the airline system can be used to extend the duration of the BA set whilst the wearer is travelling to the point where he needs to disconnect and have the flexibility of an unconstrained BA set.

ACSi

- Extended duration
- Greater operational flexibility
- Low through life costs
- High performance pneumatics

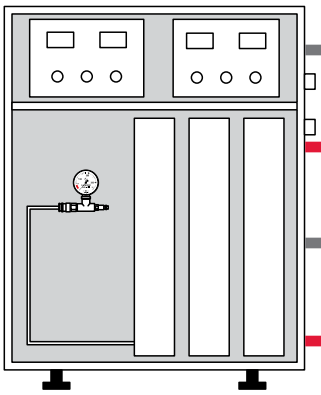
Contour 300

AIRLINE BREATHING APPARATUS

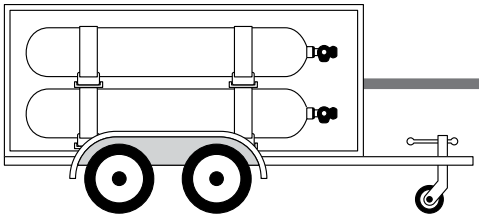
HOW TO BUILD A SYSTEM

1 PRIMARY AIR SOURCE	2 SUPPLY HOSE	3 OPTIONAL UNITS AFU	4 MODULAIR BACK-UP UNIT (OPTIONAL)	APP HOSE 10, 15, 2 ME

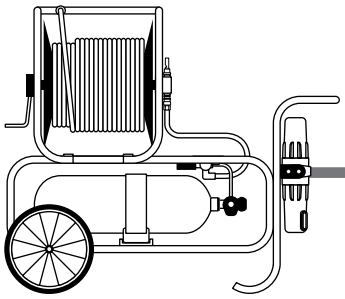
FACTORY/MOBILE AIR COMPRESSOR



TRAILER



MODULAIR



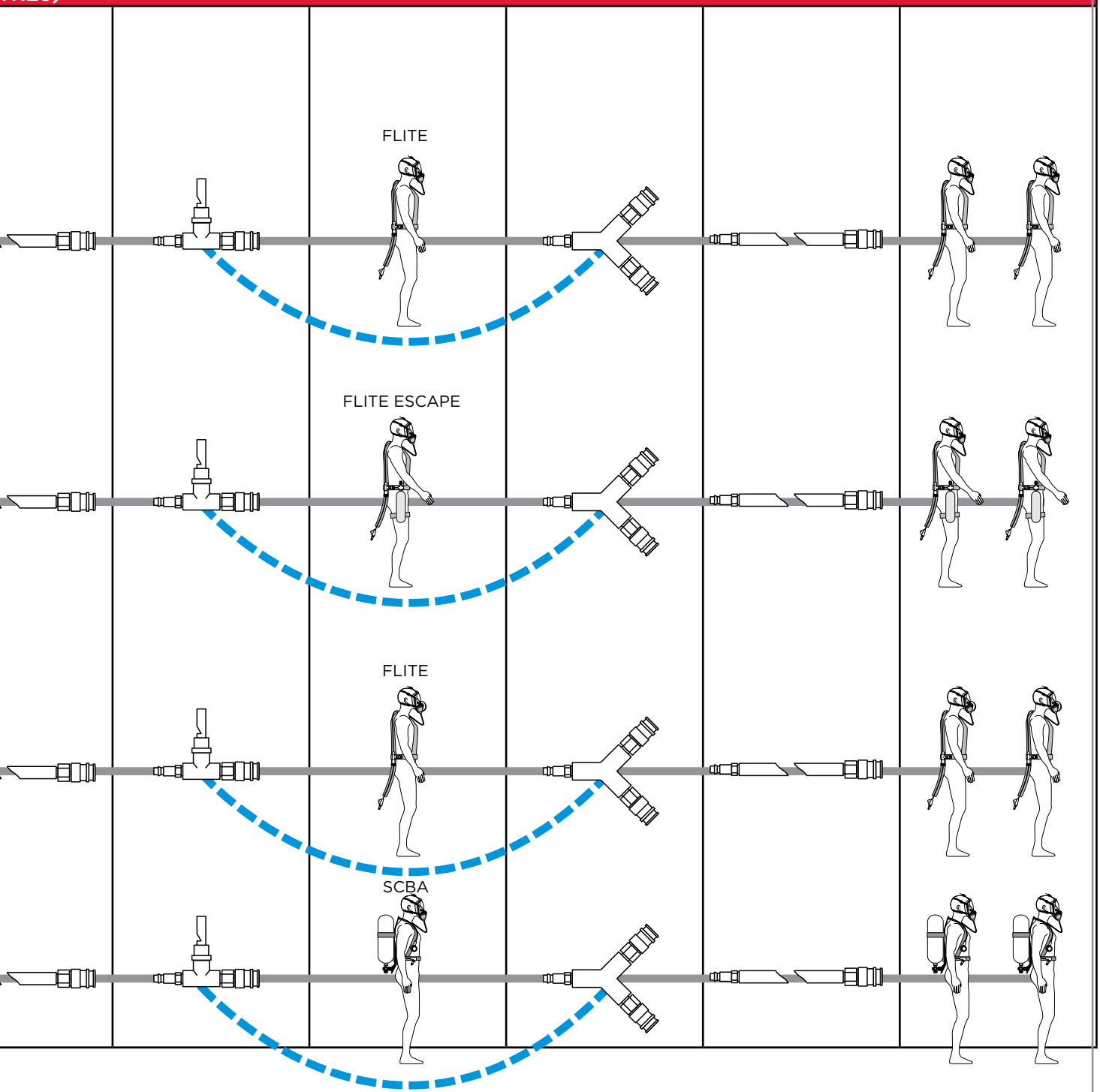
CYLINDER WITH HP-RED

KEY

CLEAN AIR
DIRTY AIR
CLEAN AIR - Bypassing Solo User Operation

THESE EXAMPLES ARE DESIGNED TO GIVE AN INDICATION OF HOW AN AIRLINE SYSTEM CAN BE BUILT UP. PLEA
AND SHOULD NOT BE CONSIDERED EXACT SPECIFICATION. MAXIMUM LENGTH OF HOSE TO THE USER AFTER TH

5 ROVED LENGTHS 20, 30, 50 TRES)	6 WHISTLE WARNING UNIT (OPTIONAL)	7 SOLO USER OPERATION	8 'Y' PIECE	9 APPROVED HOSE LENGTHS (10, 15 METRES)	10 MULTIPLE USER OPERATION



ASE NOTE THAT MANY OTHER CONFGURATIONS CAN BE SPECIFIED. NB. THE LINE DRAWINGS ABOVE ARE ONLY REPRESENTATIONS OF SCOTT SAFETY AIRLINE EQUIPMENT
HE MODULAIR SHOULD BE NO MORE THAN 105 METRES. PLEASE SEE MODULAIR USER MANUAL FOR APPROVED CONFIGURATIONS.

AIRLINE
ACCESSORIES

Y PIECE
The Y piece adds flexibility by splitting a single hose into two hoses. This allows two users to share a single air supply. (2003397)

MEDIUM PRESSURE INLINE WHISTLE
When placed in the airline system between the breathing hose and the user this device provides a safe, clear warning should the airline pressure drop below 4 bar. (1023353)

SCBA AIRLINE ATTACHMENT (optional)
This attachment is fitted on to Scott Safety SCBA enabling them to be used with an airline system. This attachment is available on both the CEN-PAQ, ACS and Contour and existing sets can be easily upgraded if required. (1025263)

HP-RED2
Reduces high pressure air from a single cylinder to medium pressure. As standard the HP-RED2 has a high pressure gauge fitted to display cylinder content. A 55 bar whistle is available together with a selection of connections to fit different types of cylinders. (1051526) (1051528)

MEDIUM PRESSURE TEST GAUGE
Allows the user to check the pressure of the airline at the point of use. (1023116)

AIRLINE FILTER UNIT (AFU)
Available in two or four user versions, the AFU removes particles, oil and water from medium pressure compressed air making it suitable for use with breathing apparatus. (BA21BOPT) (BA41BOPT)

HOSES
Hoses are available in both PVC and antistatic rubber materials in four standard lengths. All airline hose connections are CEN safety couplings that are quick and easy to connect yet prevent accidental disconnection.

1051463 - 10 metre Black PVC
1051465 - 15 metre Black PVC
1051467 - 20 metre Black PVC
1051471 - 30 metre Black PVC
1051477- 50 metre Black PVC

CYLINDERS (optional)
Scott Safety have a wide range of cylinders to suit the full range of self contained breathing apparatus and Airline apparatus.

REQUIRED
FLOW RATES

CONSTANT FLOW APPARATUS

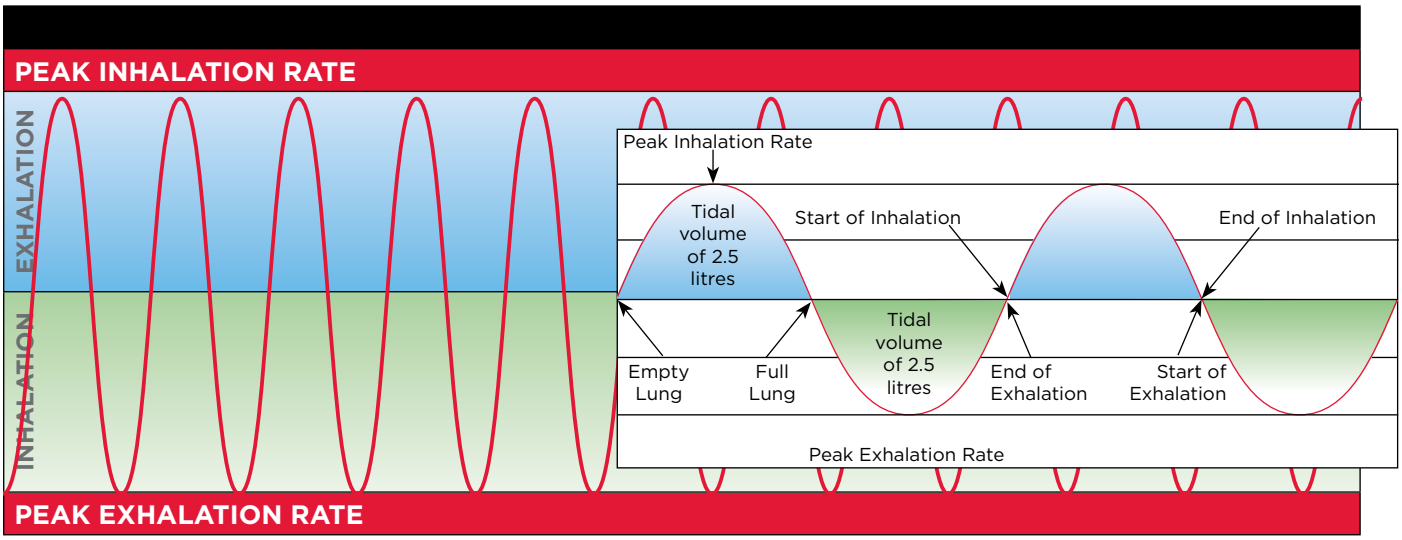
300lpm (litres per minute) per user (ie 2 users = 600lpm, 3 users = 900lpm, 4 users = 1200lpm)

DEMAND VALVE APPARATUS

1 user = 300lpm, 2 users = 450lpm, 3 users = 750lpm, 4 users = 900lpm

WHY THE DIFFERENCE?

Peak flow on demand = 2.5 litres (lung capacity) x 40 (breaths/min) x Ⓟ (as breathing is effectively a sine wave) = 300lpm 450lpm for 2 wearers (as breathing is never in sync) Total usage of air will be on average 40-50 litres of air per minute



40 breaths per minute with a 2.5 litre tidal volume

CEN COUPLINGS

CEN type couplings are the standard couplings that are used on Scott Safety airline equipment. These feature a safety locking mechanism that has a single action connect, but requires a double action to disconnect.

The male couplings are fabricated from 316 grade stainless steel. The female couplings are fabricated from Nickel-plated brass with stainless steel locking balls. The female is a self-sealing coupling and can be connected and disconnected under pressure.

The female is to a 344 pattern whilst the male coupling is to a longer 341 pattern which allows compatibility with the full range of 340 series couplings.

Scott Safety, a business unit of Tyco International, is a premier manufacturer of innovative respiratory and other personal protective equipment and safety devices for industrial workers, fire and rescue services, police, military and civil defence organisations around the world. The Scott Safety product lines include self-contained breathing apparatus, supplied air and air-purifying respirators, gas detection instruments, thermal imaging cameras, air compressors, accountability systems, head, eye, hearing and face protection.

Ordering Information

Part Number	Description
1051844	Modulair Trolley with hose reel - 2 cylinder, 2 man
1051880	Modulair Trolley with hose reel - 4 cylinder, 4 man
Escape	
1047792	Flite Airline Breathing Apparatus (no cylinder & face mask)
1044972	CEN-PAQ Airline Hi Vis Orange Vest 30 min (no cylinder & face mask)
SCBA	
2018417	ACSi AC SCBA - backplate, harness, airline pneumatics
2018362	ACSf AC SCBA - backplate, harness, airline pneumatics
2018363	ACSfx AC SCBA - backplate, harness, airline pneumatics
1045576	Contour 100 SCBA - backplate, harness, airline attachment
1045595	Contour 300 SCBA - backplate, harness, airline attachment
Accessories	
2003397	Y-Piece with CEN couplings
1023353	Medium Pressure Inline Whistle with CEN couplings
1025263	Airline Attachment
1051526	HP Reducer Whistle Pin
1051528	HP Reducer DIN 300 bar 55 bar high pressure whistle
1023116	Medium Pressure Test Gauge
BA21BOPT	Airline Filter Regulator - 2 man
BA41BOPT	Airline Filter Regulator - 4 man
1051463	10 metre Black PVC hose with CEN Couplings
1051465	15 metre Black PVC hose with CEN Couplings
1051467	20 metre Black PVC hose with CEN Couplings
1051471	30 metre Black PVC hose with CEN Couplings
1051477	50 metre Black PVC hose with CEN Couplings
013190	Promask PP Left Quick Fit (LQF) Full Face Mask
1071671	Vision 3 Left Quick Fit (LQF) Full Face Mask
2006648	Flite Cylinder 2L 200 bar Steel 10 min Escape
2006638	CEN-PAQ Cylinder 4.7L 300 bar Carbon 30 min
2006634	CEN-PAQ Cylinder 3L 300 bar Steel 20 min
1118245RAV	SCBA Cylinder 6.8L 300 bar Carbon Fibre RAV (right angle valve)
1127413RAV	SCBA Cylinder 9L 300 bar Carbon Fibre RAV (right angle valve)
1118245T	SCBA Cylinder 6.8L 300 bar Carbon Fibre T (T Valve)
1127413T	SCBA Cylinder 9L 300 bar Carbon Fibre T (T Valve)

Scott Safety has developed a number of different documents to aid selection of respiratory protection. Technical Data Sheets are available for each Scott Safety respiratory system. Please contact our Customer Service Department on 131 772, email scott.sales.anz@tycoint.com or visit www.scottsafety.com for further information

Scott Safety is a global business unit of Tyco International that supplies a variety of industries through manufacturing facilities located in the United States, United Kingdom, Asia, Finland and Australia.

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